Longest Increasing Subsequence (View)

Given an integer array `nums`, return the length of the longest strictly increasing subsequence.

A **subsequence** is a sequence that can be derived from an array by deleting some or no elements without changing the order of the remaining elements. For example, `[3,6,2,7]` is a subsequence of the array `[0,3,1,6,2,2,7]`.

Example 1:

```
Input: nums = [10,9,2,5,3,7,101,18]

Output: 4

Explanation: The longest increasing subsequence is [2,3,7,101], therefore the
length is 4.
```

Example 2:

```
Input: nums = [0,1,0,3,2,3]

Output: 4
```

Example 3:

```
Input: nums = [7,7,7,7,7,7,7]

Output: 1
```

Constraints:

- `1 <= nums.length <= 2500`
- -10^4 `<= nums[i] <=` 10^4

Follow up: Can you come up with an algorithm that runs in `O(n log(n))` time complexity?